REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-11, 29-38 and 55-58 are pending. Claims 1, 6, 29, 31, 35, 55 and 57 are independent, and hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed and specifically in pages 13-15 (paragraphs [0097]-[0103]). It is submitted that these claims, as originally presented, were in full compliance with the requirements of 35 U.S.C. §112. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §101

In response to the rejections under 35 U.S.C. §101, Applicants submit that the specification, as originally filed, includes a statement identifying the computer readable media in page 22, paragraphs [0130]-[0132] and Fig. 27 of Applicants' corresponding published application, which describes "The computer incorporates a CPU (Central Processing Unit) 701, as shown in FIG. 27. The CPU 701 is connected via a bus 720 to a ROM 702, a RAM 703, a hard disk drive 704, and an input/output interface 705." There should be no dispute that a ROM or a

RAM is a computer-readable medium. It, of course, is well known that other computer readable media exist. It is respectfully submitted that those of ordinary skill in the art, and even those having less than ordinary skill, are well aware of the fact that computer-readable media are commercially available in several different forms, such as ROM, RAM, recording disks and the like.

Such computer-readable media are predictable in that their structure and functions are well-known. It is submitted that there is no need to identify, in this application, all possible, conventional computer-readable media. Thus, Applicants respectfully request the rejections be withdrawn.

III. REJECTIONS UNDER 35 U.S.C. 35 U.S.C. §103(a)

Claims 1, 2, 4, 5, 29-34 and 55-58 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,550,928 to Lu (hereinafter, merely "Lu") in view of U.S. Patent No. 7,266,771 to Tow (hereinafter, merely "Tow").

Claim 3 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Lu in view of Tow and further in view of U.S. Patent No. 6,792,135 to Toyama (hereinafter, merely "Toyama").

Claims 6-10 and 35-37 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Lu in view of Tow and further in view of U.S. Patent No. 7,373,209 to Tagawa (hereinafter, merely "Tagawa").

Claims 11 and 38 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Lu in view of Tow in view of Tagawa and further in view of WO 91/03912 to Stevens (hereinafter, merely "Stevens").

IV. RESPONSE TO REJECTIONS

i) Claim 1 recites, *inter alia*:

> "...movement amount detection device for detecting a movement amount of said audience **based on flesh-color area which is extracted from said video signal, the flesh-color area identifying flesh color**..." (Emphasis added)

Applicants submit that neither Lu nor Tow, taken alone or in combination, that would teach or suggest the above-identified features of claim 1. Specifically, neither of the references used as a basis for rejection describes or suggests movement amount detection device for detecting a movement amount of said audience **based on a flesh-color area which is extracted from said video signal, the flesh-color area identifying flesh color**, as recited in claim 1.

Specifically, the Office Action (page 4) asserts that Lu teaches detecting a movement amount by tracking a person, and refers to col. 10, lines 6-25, which are reproduced as follow:

> "Before the head finding routine 54 and the face finding routine 58 are performed, however, viewers are tracked from image to image. Tracking is initiated by detecting motion in the monitored viewing area 10. In order to detect motion, sequential images of the monitored viewing area 10 are obtained from the video multiplexer and digitizer 50 and each sequential pair of such images are subtracted one from the other in order to determine if motion has occurred. That is, if one video image of the viewing area is different than the next video image of the same viewing area, it may be concluded that the difference is due to motion. If motion is detected, the viewers appearing in previous images of the monitored viewing area 10 are tracked; if no motion is detected, no tracking

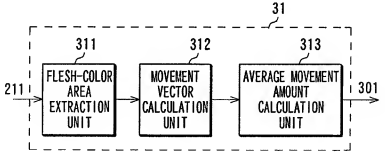
needs to be performed. The difference image obtained by subtracting one image from another, in combination with tracking, may also provide an indication of whether a new viewer has entered the monitored viewing area 10."

Thus, in Lu, **the motion of the audience is tracked based on the difference between one video image of the viewing area and the next video image of the same viewing area.**

However, Applicants submit that in the present invention, paragraph [0097] of Applicants' corresponding published application, which describes the movement amount detection unit shown in Fig. 5, is reproduced as follow:

"[0097] FIG. 5 shows a configuration of the movement amount detection unit 31. A flesh-color area extraction unit 311 discriminates a pixel range capable of identifying flesh color in an RGB color space, a YIQ color space or an HSV color space. For example, in the RGB color space, threshold values showing a red signal range, a green signal range, and a blue signal range, which identify flesh color, are set to discriminate, for each pixel, whether the signal levels of three primary-colors signals generated based on the video signal 211 are within the area of flesh color or not, thereby extracting the pixel range (hereinafter, called a "flesh-color area") which can identify flesh color."

F I G. 5



Thus, **in the present invention, the movement amount is detected based on the flesh-color area, which is extracted pixel range which identifies flesh color**. Nothing has been found in Lu that would teach movement amount detection device for detecting a movement

amount of said audience **based on flesh-color area which is an extracted from said video signal, the flesh-color area identifying flesh color**, as recited in claim 1.

Furthermore, this deficiency of Lu is not cured by the supplemental teaching of Tow.

Therefore, Applicants respectfully submit that claim 1 is patentable.

For reasons similar to those described above with regard to independent claim 1, the independent claims 29, 31, 55 and 57 are also patentable.

ii) Claim 6 recites, *inter alia*:

> "...movement periodicity detection device for detecting movement periodicity of said audience **based on a flesh-color area which is extracted from said video signal, the flesh-color area identifying flesh color**..." (Emphasis added)

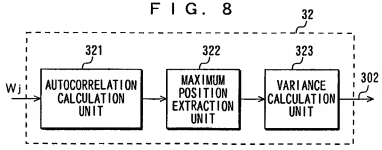
Applicants submit that neither Lu nor Tow nor Tagawa, taken alone or in combination, that would teach or suggest the above-identified features of claim 6. Specifically, none of the references used as a basis for rejection describes or suggests movement periodicity detection device for detecting movement periodicity of said audience **based on a flesh-color area which is extracted from said video signal, the flesh-color area identifying flesh color**, as recited in claim 1.

In the present invention, paragraph [0103] of Applicants' corresponding published application, which describes the movement periodicity detection unit shown in Fig. 8, is reproduced as follow:

> "[0103] FIG. 8 shows a configuration of the movement periodicity detection unit 32. An autocorrelation calculation unit 321 calculates autocorrelation coefficient

RV for each frame based on following Formula (3) using the average movement amount Wj obtained by the movement amount detection unit 31."

FIG. 8



Thus, **in the present invention,** the movement periodicity is calculated based on the average movement amount Wj, which is obtained by the movement amount detection unit 31 (also see Specification, Fig. 4), *i.e.*, **the movement periodicity is also detected based on the flesh-color area.**

Thus, similarly to the reason mentioned in the above section, nothing has been found in Lu and Tow that would teach movement periodicity detection device for detecting movement periodicity of said audience **based on flesh-color area which is extracted from said video signal, the flesh-color area identifying flesh color**, as recited in claim 6.

Furthermore, this deficiency of Lu and Tow is not cured by the supplemental teaching of Tagawa.

Therefore, Applicants respectfully submit that claim 6 is patentable.

For reasons similar to those described above with regard to independent claim 6, the independent claim 35 is also patentable.

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V. DEPENDENT CLAIMS

The other claims are dependent from an independent claim, discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

Similarly, because Applicants maintain that all claims are allowable for at least the reasons presented hereinabove, in the interests of brevity, this response does not comment on each and every comment made by the Examiner in the Office Action. This should not be taken as acquiescence of the substance of those comments, and Applicants reserve the right to address such comments.

CONCLUSION

In the event the Examiner disagrees with any of the statements appearing above with respect to the disclosures in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate the portion, or portions, of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

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In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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